

**BY ORDER OF THE COMMANDER  
482D FIGHTER WING**

**482D FIGHTER WING INSTRUCTION 21-133**

**4 APRIL 2012**



**Maintenance**

**FUNCTIONAL/OPERATIONAL CHECK  
FLIGHT**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This instruction implements Functional Check Flights (FCF) and Operational Check Flight (OCF) procedures at Homestead Air Reserve Base (HARB). It applies to all personnel in the 482d Maintenance Group (482 MXG), 482d Operations Group (482 OG) and 93d Fighter Squadron (93 FS) FCF qualified pilots. It incorporates procedures from Air Force Instruction (AFI) 21-101, *Aircraft and Equipment Maintenance Management*, AFI 11-202V3\_ACCSUP, *General Flight Rules*, Technical Order (TO) 00-20-1-WA-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policy and Procedures* and TO 1-1-300, *Maintenance Operational Checks and Check Flights*. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using Air Force Form 847 (AF Form 847), *Recommendation for Change of Publication*; route AF Form 847 from the field through the appropriate functional's chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records* and disposed of in accordance with the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afrims/afrims/rims.cfm>.

**1. General.** The 482 MXG/CC, 482 OG/CC, FCF qualified pilots, and maintenance supervisors will ensure procedural compliance with this instruction. Adherence to these procedures will ensure a safe and effective FCF Program. 482 MXG, *OCF Briefing Checklist*, and 482 MXG, *FCF Briefing Checklist* were developed to assist Quality Assurance (QA) personnel in making sure that all required documentation and actions are completed. The forms are located on the local server.

**2. Procedures.**

2.1. F-16 aircraft requiring a FCF are flown clean (no external stores) and with a full internal fuel load, unless approved otherwise by the 482 OG/CC.

**2.2. Flight crew briefings:**

2.2.1. QA will carry out all flight crew briefings. Upon completion, the FCF/OCF pilot will brief the 482 OG/CC (or designated representative) on the purpose of the check flight, its profile and any expected deviations.

**3. Responsibilities.**

3.1. The 482 OG/CC will appoint an Officer in Charge (OIC) of the FCF Program. This individual will implement, manage and submit recommendations to improve FCF criteria and procedures to the QA Superintendent.

**3.2. Maintenance Operations Center (MOC) will:**

3.2.1. Notify QA and 93 FS Operations of the probable need for an FCF.

3.2.2. Notify QA upon return of aircraft for debriefing.

**3.3. 482d Aircraft Maintenance Squadron (482 AMXS) will:**

3.3.1. Pre-flight the aircraft and sign the Exceptional Release.

3.3.2. Notify QA when the aircraft is ready for the pre-flight Quality Verification Inspection (QVI).

3.3.3. Remove old Air Force Technical Order (AFTO) Forms 781A, *Maintenance Discrepancy and Work Document* and transcribe open discrepancies to a new AFTO Form 781A (**Note:** Do not remove if a previous FCF attempt has been made).

3.3.4. Deliver aircraft forms (active and transcribed) to QA with the forms that document the maintenance action which generated the requirement for a FCF/OCF. **NOTE:** A battery Direct Current (DC) Generation Check is performed within five days of an FCF.

**3.4. QA will:**

3.4.1. Coordinate with the Production Superintendent or Expediter for the pilot briefing.

3.4.2. Initiate the FCF Checklist and provide it to the FCF pilot.

3.4.3. Conduct a pilot FCF briefing.

3.4.4. Review the aircraft forms for completeness and accuracy.

3.4.5. Keep MOC informed of all FCF actions.

3.4.6. Accomplish an aircraft FCF Preflight QVI.

3.4.7. Document entries pertaining to the FCF on AFTO Forms 781A and Integrated Maintenance Documentation System (IMDS).

3.4.8. Retain the aircraft forms and FCF checklist in QA and deliver them to the pilot at the time of the FCF briefing.

3.4.9. Forward the completed FCF checklist to 482d Maintenance Operations Flight Plans, Scheduling, and Documentation section (PS&D) (482 MOF/MXOOC) for filing after the FCF is complete.

**4. FCF Pilot Requirements.**

- 4.1. **The 93 FS/CC or 93 FS Director of Operations (93FS/DO) selects and the 482 OG/CC approves all FCF pilots.**
- 4.2. If an FCF is required while the aircraft is deployed and a certified FCF pilot is not available, the detachment commander can designate a highly qualified pilot to perform FCF duties.
- 4.3. The FCF pilot will comply with any expanded preflight and flight checks outlined by QA and the T.O. 1F-16C-6CL-1 provided for the flight.

**5. FCF Flight Requirements.**

- 5.1. A full profile FCF may be flown at the 482 OG/CC's discretion.
- 5.2. The FCF profile is normally tailored for the maintenance requirements that generated the FCF.
- 5.3. FCFs are not flown in conjunction with other missions.
- 5.4. FCFs are flown during daylight hours only.
- 5.5. Weather requirements will normally be Visual Meteorological Conditions (VMC) and weather requirements IAW T.O. 1-1-300. The 482 OG/CC may waive certain weather requirements IAW T.O. 1-1-300.
- 5.6. FCF flights will utilize the HST-2 stereo flight plan and W465 airspace. FCF pilots will follow procedures outlined in the current Mako Pilot Aid.

**6. Taxi Check for Maintenance.**

- 6.1. Routine taxi checks will be accomplished by an experienced pilot.
- 6.2. High-speed taxi checks will not be accomplished under any circumstances.

**7. Operational Check Flights (OCF) Procedures.** OCF will be accomplished as prescribed by AFI 21-101 and AFI 11-202V3\_ACCSUP. OCF procedures will follow the same maintenance criteria contained in this instruction.

DONALD R. LINDBERG, Colonel, USAFR  
Commander, 482d Fighter Wing

**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 11-202V3\_ACCSUP, *General Flight Rules*, 27 February 2007

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 26 July 2010

AFMAN 33-363, *Management of Records*, 1 March 2008

<https://www.my.af.mil/gcss-af61a/afrims/afrims/rims.cfm>

TO 00-20-1-WA-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policy and Procedures* 1 September 2010

T.O. 1-1-300, *Maintenance Operational Checks and Check Flights*, 7 November 2007

***Adopted Forms***

AF Form 673, *Air Force Publication/Form Action Request*

AF Form 847, *Recommendation for Change of Publication*

AFTO Form 781A, *Maintenance Discrepancy and Work Document*

***Abbreviations and Acronyms***

**AF**—Air Force

**AFI**—Air Force Instruction

**AFMAN**—Air Force Manual

**AFRC**—Air force Reserve Command

**AFRIMS**—Air Force Records Information Management System

**AFTO**—Air Force Technical Order

**AMXS**—Aircraft Maintenance Squadron

**ART**—Air Reserve Technician

**CC**—Commander

**CD**—Deputy Commander

**DC**—Direct Current

**FCF**—Functional Check Flight

**FS**—Fighter Squadron

**FW**—Fighter Wing

**FWI**—Fighter Wing Instruction

**IAW**—In Accordance With

**IMDS**—Integrated Maintenance Documentation System

**MOC**—Maintenance Operations Center

**MOF**—Maintenance Operations Flight

**MXG**—Maintenance Group

**MXQ**—Maintenance Group Quality Assurance Office

**OCF**—Operational Check Flight

**OG**—Operations Group

**OIC**—Officer in Charge

**OPR**—Office of Primary Responsibility

**PS&D**—Plans Scheduling and Documentation

**QA**—Quality Assurance

**QVI**—Quality Verification Inspection

**RDS**—Records Disposition Schedule

**SOF**—Supervisor of Flying

**SUP**—Supplement

**TO**—Technical Order

**USAF**—United States Air Force

**VMC**—Visual Meteorological Conditions